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MEES'LINE FOLLOWING CHEMOTHERAPY

Sunil Kumar, Sanjay Diwan, Milind Dekate, Sonam Goyal

Department of Medicine, Jawahar Lal Nehru Medical College, DMIMS, Sawangi, wardha, Maharastra, India

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Corresponding author: Prof. Sunil Kumar

sunilkumarmed@gmail.com

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Sir

Cytotoxic chemotherapeutic agents has many systemic affect specially involving rapidly proliferating organs, such as skin, hair, and the gastrointestinal tract manifesting as exfoliative dermatitis, alopecia, and diarrhea, respectively. We are presenting here effect of chemotherapy on nail which is a "skin" appendage. A 19-year-old tribal boy from rural Maharashtra was diagnosed as Acute Myeloid Leukaemia (M4) and was on combination chemotherapy as cytarabine and daunorubicine (cycles of 3-week intervals). This time he came for 3rd cycle. On physical examination his nails had transverse line parallel to the lunula across the entire nail bed with no palpable ridges which were white and nonblanching (Fig. 1). These lines are known as Mees' lines (true leukonychia). Distance between them is usually related to the cycles intervals after each chemotherapy cycle [1]. As most of the time patients are not aware of appearance of the lines, the timing of the disease process may be estimated by measuring the distance from the line to the nail bed assuming that nails grow about 1mm every 6 to 10 days [2]. Mees' lines are signs of toxicity to the distal nail matrix, resulting in parakeratosis of the nail plate, which becomes white and opaque. Drug-induced true leukonychia (Mees' lines) appears as one or several parallel transverse white bands affecting all nails at the same level and moving distally with nail growth [3]. Another line which may be confused with Mees' lines are Muehrcke's lines (apparent leukonychia). These are paired white lines caused by vascular congestion in the nail bed and they do not fade after digital compression and migration with the growth of the nail [4]. Other causes of Mees' lines are arsenic and thallium intoxication, carbon monoxide poisoning, Hodgkin's disease, myocardial infarction, congestive heart failure, acute and chronic renal failure, systemic lupus erythematosus, immune haemolytic anaemia, leprosy, malaria, chemotherapy, and other systemic insults [2].



Figure 1. Mees'line on nails

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